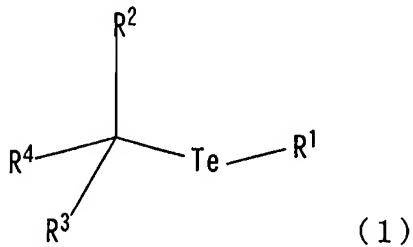


### Amendments to the Claims

1. (Currently amended) A process for producing a living radical polymer which comprises polymerizing a vinyl monomer in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

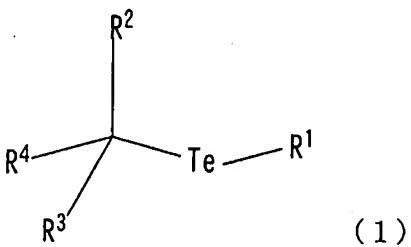


wherein R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub> alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R<sup>2</sup> and R<sup>3</sup> are each a hydrogen atom or C<sub>1</sub>-C<sub>8</sub> alkyl, and R<sup>4</sup> is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R<sup>1</sup> is the same as above, to obtain a living radical polymer having a molecular weight distribution of 1.05 to 1.50.

2. (Currently amended) A living radical polymer having a molecular weight distribution of 1.05 to 1.50 produced by polymerizing a vinyl monomer in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

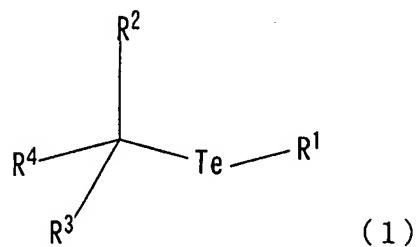


wherein R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub> alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R<sup>2</sup> and R<sup>3</sup> are each a hydrogen atom or C<sub>1</sub>-C<sub>8</sub> alkyl, and R<sup>4</sup> is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R<sup>1</sup> is the same as above.

3. (Previously presented) A mixture of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)



wherein R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub> alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R<sup>2</sup> and R<sup>3</sup> are each a hydrogen atom or C<sub>1</sub>-C<sub>8</sub> alkyl, and R<sup>4</sup> is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R<sup>1</sup> is the same as above.